

REMARKS

The Examiner's allowance of claims 29-36 and indication of allowability of claims 5 and 8, if rewritten in independent form, are acknowledged and appreciated.

Claims 1-4, 13, 14, 37 and 38 stand directed under 35 U.S.C. §102(b) as being anticipated by Hack et al. (US 6,894,461). Applicants respectfully traverse this rejection because the cited reference does not disclose (or suggest) the claimed switch in an electrical path from each of the voltage inputs for conducting current from and blocking current to the voltage inputs, as described in the claims.

The present invention is directed to a buck-boost converter for converting voltages from a number of voltage sources to at least one DC output voltage. Multiple voltage sources are combined in one converter. A switch is provided in the electrical path from each of the voltage sources for conducting current from and blocking current to the voltage inputs.

The Hack et al. reference relates to a system for providing bidirectional power conversion for multiple buses. Referring to Fig. 3 of the reference, Hack et al. discloses that any one bus B0-BN has the ability to take power from or pass power to any of the other busses in the circuit (see col. 5, lines 32-50). The connections between these buses are controlled through switches S0-SN which open and close "to change the flow of power among various buses B0 141-BN 143" (col. 4, lines 10-11). Thus, the Hack et al. reference teaches using switches that allow bidirectional power flow between two or more power components.

As described in independent claims 1, 15, 26 and 37, the present invention is provided with switches that conduct current from and block current to the voltage inputs. In contrast, the Hack et al. reference expressly teaches using bidirectional switches which enable current to flow in both directions, i.e., to and from a voltage source. For at least this reason, claims 1-4, 13, 14, 37 and 38 are allowable over Hack et al.

Claims 9-12 stand rejected under 35 U.S.C. §1023(a) as being unpatentable over Hack et al. Applicants traverse this rejection for the same reason given with respect to

claim 1, from which these claims depend, and because of the additional features described in these claims.

Claims 15-28 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Hack et al. in view of King (US 5,710,699). Independent claims 15 and 26 have been amended to recite that a switch conducts current from and blocks current to the voltage inputs, as in claim 1. Accordingly, the rejection of these claims is traversed for the same reasons given with respect to claim 1. Withdrawal of the rejection is respectfully requested.

For all of the above reasons, the present invention is now believed to be in condition for allowance, which is respectfully requested. The Examiner should contact the undersigned attorney if a telephone conference would expedite prosecution.

Respectfully submitted,

GREER, BURNS & CRAIN, LTD.

By

A handwritten signature in black ink, appearing to read "B. Joe Kim", with a long horizontal line extending to the right.

B. Joe Kim

Registration No. 41,895

May 24, 2006

300 South Wacker Drive, Suite 2500
Chicago, Illinois 60606
(312) 360-0080
Customer No. 24978